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PPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/607,775	06/27/2003	Doug Gettman	030605.002	6449
34142 759	90 08/05/2005		EXAMINER	
GALLAGHER	R & DAWSEY CO., L.P	DRODGE, JOSEPH W		
P.O. BOX 785 COLUMBUS, OH 43216			ART UNIT	PAPER NUMBER
COLUMDOS,	011 15210		1723	

DATE MAILED: 08/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summer	10/607,775	GETTMAN, DOUG				
Office Action Summary	Examiner	Art Unit				
	Joseph W. Drodge	1723				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period or - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be till y within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE.	mely filed ys will be considered timely. In the mailing date of this communication. ED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
	action is non-final.	•				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-26</u> is/are pending in the application	l . .					
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-16,18-23,25 and 26</u> is/are rejected.						
7) Claim(s) 17 and 24 is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers		,				
9)☐ The specification is objected to by the Examine	er.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct	· ·					
11)☐ The oath or declaration is objected to by the Ex		•				
Priority under 35 U.S.C. § 119						
12)☐ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)-(d) or (f).				
a) ☐ All b) ☐ Some * c) ☐ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list	of the certified copies not receive	ed.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate Patent Application (PTO-152)				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>0603</u> .	6) Other:	C (C-102)				
U.S. Patent and Trademark Office PTOL-326 (Rev. 1-04) Office Ad	ction Summary	Part of Paper No./Mail Date 0805				

Art Unit: 1723

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-26 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-28 of copending Application No. 10/713,944 in view of Gordon et al PGPUBS Document US2004/0065614. The instant claims substantially duplicate those of '944 except for not including the limitation of "multi-service mobile telecommunication system with satellite and terrestrial transmission". However, Gordon et al teach a mobile water treatment system having such system in paragraph 110 concerning transmission of data through a public network transmission channel. Thus, it would have been obvious to one of ordinary skill in the art to have supplemented the system defined in the claims of '944 with the mobile telecommunication system of Gordon et al, to enable communication with distant supervisory operating personnel, when the water treatment system is deployed to remote geographic areas.

This is a <u>provisional</u> obviousness-type double patenting rejection.

Art Unit: 1723

Claims 23,25 and 26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each of these claims, recitations of "at the booster pump system optimal flow rate" are indefinite for lack of antecedent basis and lack or metes and bounds for what may constitute "optimal".

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1,2,5,7-10,12-14 and 18-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horner et al patent 5,244,579 in view of Marius et al patent 5,059,317 and Donath Derwent patent DE 3,243,147.

Horner et al disclose a complex water treatment installation that includes systems of: raw water supply from raw or sea water source (column 1,lines 6-19), filtration (column 5, lines 50-55), reverse osmosis (the 2nd pass RO unit of column 6,

Art Unit: 1723

lines 27-37), desalination (the 1st pass RO unit of column 10, lines 20-22 and column 11, lines 57-59 for "seawater" and "to demineralize"), storage (column 5, lines 30-32), ion-exchange (column 2, lines 60-61), heating (column 12, lines 31-37 and column 13, line 63), dispensing/distribution (column 1, lines 63-65 and column 2, lines 42-43), piping with valves (column 11, lines 7-17), provision of electric power (column 12, lines 24-25) and discloses a vehicle for transporting the entire installation (column 1, lines 6-12 and other text).

The claims all differ in requiring that the ion exchange system be of the "sodium" type. However, Donath teaches such type ion exchange system in an installation for purifying raw water such as sea water (part b, (2)) of Basic-Abstract as does Marius et al at column 3, lines 26-31. Thus it would have been obvious to one of ordinary skill in the art to have utilized a sodium type ion exchange unit in the ion exchange system of Horner, as taught by Donath and Marius, to effectively soften the raw water and remove a maximum of suspended solids and mineral matter.

Horner also discloses the following: a booster pump at column 9, line 16 for claim 2, chlorine disinfection at column 2, lines 56-58 for claims 9-10, a truck bed for fluid "containment" for claim 14, plural storage tanks for both non-potable and potable water in the form of a bladder tank at column 10, lines 40-42 for claim 19, pre-filters upstream of the reverse osmosis units at column 5, lines 49-59 for claim 20, suggestion of positive displacement for the booster pump at column 9, lines 12-18 for claim 22, the heater being operable for elevating temperatures by at least 100 degrees farenheit at

Art Unit: 1723

column 10, line 66-column 11, line 6 where operation at temperatures of well below zero or under "frigid" conditions are discussed.

Marius teaches the further features of ozone disinfection at column 3, lines 20-22 for claim 12, rainwater collection in raw water collection source 2, the ion exchange system comprising softener and source of salt or "brine tank" at column 3, lines 26-31 for claim 18, a tank for drinking water storage at column 4, lines 15-16 for claim 19, operability of the reverse osmosis units of removing greater than 90% of a variety of substances at column 3, lines 32-36 for claim 21.

The Donath Derwent publication further teaches combining reverse osmosis with distillation systems that comprise evaporation and condensing in the Equivalent Abstracts section for claims 5,7 and 8.

Claims 3,6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horner et al in view of Marius et al and Donath as applied to claim 1 above, and further in view of Fagih patent 6,684,648.

Claims 3 and 6 also require a solar energy source. Faqih teaches such source utilized for transportable water treatment a tcolumn 7, lines 33-38. It would have been further obvious to one of ordinary skill in the art to have utilized the solar energy source of Faqih in the Horner et al installation, in order to extract some water from humid air and to readily provide energy in hot, sunny locations without dependence on electricity.

Claim 11 also requires UV treatement, as taught in column 19, lines 43-47 of Faqih. It would have been further obvious to have provided the UV treatment of Faqih

Application/Control Hamb

Art Unit: 1723

in the Horner et al installation, since UV is more effective for sterilizing relatively small quantitites of water that are not held in storage for long periods of time.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horner et al in view of Marius et al and Donath as applied to claim 1 above, and further in view of Capehart patent 5,547,584. Claim 15 further differs in requiring a sand filter, such as taught by Capehart at column 9, lines 28-30. It would have been further obvious to have provided a sand filter such as taught by Capehart since such type filters strain large amounts of larger debris from incoming raw water while allowing a high flow rate therethrough.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Horner et al in view of Marius et al and Donath as applied to claim 1 above, and further in view of Wang patent 5,190,659.

Claim 16 also requires a diatomaceous earth containing filter, such as taught by Wang in multi-component water purification system in the Summary of the Invention. It would have been further obvious to the skilled artisan to have provided diatomaceous earth with one or more of the filters of the Horner et al composite installation to reduce clogging of the filter(s) and provide greater filtration flux rates.

ALLOWABLE SUBJECT MATTER

Claims 17 and 24 are objected to as being dependent upon a rejected base supply from the Double Patenting Rejection, claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 1723

Claim 17 distinguishes in reciting the installation as further comprising a coalescing plate and an oil skimmer. The prior art transportable water treatment installations do not envision raw water sources containing large amounts of oil or oil/water emulsions.

Claim 24 further differs in requiring the installation as encompassing shower heads. The prior art primarily is directed towards providing drinking water for immediate distribution, mainly under field conditions and does not suggest the plumbing necessary to provide facilities such as showers.

Claims 25 and 26 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Independent claim 25 would distinguish in view of recitation of the same combination of features in a complex water treatment installation as provided in claim 1 with the further recitation of features encompassing the raw water filtration system comprising coalescing plate, oil skimmer, reticulated media filter and filter bag. Again, the prior art does not suggest raw water sources which are so intermingled or contaminated with oil that oil/water skimming and coalescing are necessary.

Independent claim 26 would distinguish in view of recitation of the same combination of features as are recited in the complex water treatment installation of claim 1 with further recitation of features encompassing shower heads. The prior art does not contemplate bathing facilities or plumbing such as would comprise features such as shower heads.

Art Unit: 1723

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tempest patents 6,824,695 and 5,741,416 and Busch patent 5,558,775 are additional prior art concerning complex, transportable water treatement installations which were considered in the preparation of this Office Action.

Art Unit: 1723

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Drodge at telephone number 571-272-1140. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker, can reached at 571-272-1151. The fax phone number for the examining group where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either private PAIR or Public PAIR, and through Private PAIR only for unpublished applications. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JWD

August 2, 2005